

**Montana Automated Child Welfare Information System (MACWIS)  
(aka CAPS Replacement Project)  
An Overview and Status for the 2013 Joint Appropriations Subcommittee on  
Health and Human Services  
February 15, 2013**

**Project Summary and Status**

The Montana Automated Child Welfare Information System (MACWIS) project was funded to replace Child and Adult Protective Services system (CAPS), the Montana's current statewide automated child welfare information system (SACWIS), with a state-of-the-art system that utilizes advanced software components and capabilities. CAPS is a mainframe-based system used in the monitoring of foster care cases, adoption cases, provider contracts and licensing, financial accounting, payments for services to providers and reporting.

Funding for MACWIS was appropriated \$27,150,000 in the 2007 legislative session in the Long Range Information Technology (LRIT) bill. Rationale for replacement include federal changes to child welfare policy and system requirements that cannot be met in an aging system that is expensive to maintain and difficult to update and extend.

The planning phase of the project was initiated in 2009 and proceeded with alternatives analysis, feasibility study, and requirements definition. Expenditures on the planning phase totaled \$1.4 million. In 2011, due to a shortfall in the State's general fund balance that triggered actions prescribed by 17-7-140 Montana Code Annotated (MCA), the MACWIS project was postponed and most of the remaining long range appropriation reverted back to the general fund.

**MACWIS Purpose and Objectives**

The purpose for MACWIS is to improve the availability and quality of the information necessary for the effective delivery of timely and accurate services required to protect Montana's at risk children, to help preserve Montana families, and to provide data integrity and system availability.

MACWIS will provide the all the functionality required of a federally certified SACWIS. It will also provide Montana specific functionality along with the expected availability and quality of information necessary for the effective delivery of timely and accurate services required to support Montana's child welfare program.

The MACWIS project has the following objectives:

- Increase the efficiency of the collection, reporting, and analysis of data at the state program level.
- Enable administrators to measure performance and quality by assessing the timeliness, efficiency, appropriateness, and effectiveness of services.
- Improve program management, security, quality assurance and program services.
- Reduce the time and cost required to make modifications and enhancements.
- Automate business rules through the use of new technology.

- Improve interfaces with Title IV-A (TANF), Title IV-D (Child Support Enforcement), Title XIX (Medicaid) and the State's financial and administrative systems.
- Provide secure access to providers.
- Enhance decision support through user accessible data mining and analysis functionality.

### **Technical Implementation Approach**

MACWIS will employ advanced software engineering principles and architecture to create a secure web-based system that allows for ease of use and facilitates information exchange with other State and federal systems. The ideal platform of MACWIS is envisioned to possess the following (or similar) tools and technologies:

- A relational database management system (RDBMS). Oracle is the Department's preferred RDBMS and the standard for the State of Montana.
- An application server to serve as the web and application server (also sometime referred to as the "middle tier").
- An object oriented development platform (e.g. Java, Second Edition, Enterprise Edition (J2EE)) as the development and runtime environment.
- A dynamic user interface (web pages) that provide communication between the user and the middle tier (e.g. JavaServer Pages).
- Technology to isolate and map the underlying relational database from the object-oriented development environment (e.g. Red Hat Hibernate).
- A Business Rules Engine (e.g. ILOG's JRules) that provides a repository and interface for policy and business rules that can be defined and understood by business analysts and policy experts.
- A Service Oriented Architecture (SOA) to enable information sharing and exchange with other State and federal systems.

### **Business and IT Problems Addressed**

The Child and Adult Protective Services (CAPS) system is Montana's current child welfare system. This system is critical in supporting the services required to protect children from abuse and neglect, a key aspect of the Department's mission to improve and protect the health, well-being, and self-reliance of all Montanans. As a Statewide Automated Child Welfare Information System (SACWIS), CAPS is utilized by the Child and Family Services Division (CFSD) to facilitate the case management of child protective services, services to juvenile probation and parole, services to youth in the State's youth institutions, tribal social services and licensing activities.

CAPS, now more than 15 years old, has the following issues and deficiencies that put it at risk and comprise the Department's ability to support its child welfare program:

- CAPS is not SACWIS compliant and does not meet all of the needs of state child welfare practice. These findings were noted in the November 15, 2007 Montana CAPS site visit report.
- Built on technology that was outdated at the time of implementation, CAPS is substantially at risk for serious failure and is very expensive to maintain. CAPS maintenance costs average \$1.49M per year.
- CAPS requires considerable training, is difficult to use, and does not promote and enforce the accurate entry of information. Workers must memorize hundreds of three, four and five digit codes. Workers often fail to enter complete or correct data. Furthermore, staff will often limit the data they input due to the cumbersome and time consuming process to enter case information.
- Incomplete and erroneous data entered into CAPS often results in inaccurate federal, state and local management reports.
- Lack of integration of data and processes results in missing data that hamper decision making. For example, data entered into the document generation component of CAPS or into case management files stored on local-office file servers are not captured by the CAPS database and therefore unavailable to workers.
- CFSB practice changes are pushing more process, decision making and documentation into manual or location specific behavior because the existing CAPS system can't be modified to accommodate change.

### **MACWIS Restart**

At the time the MACWIS project was stopped, approximately 90% of the planning phase was completed, with all core requirements defined and a preliminary Request for Proposal (RFP) drafted. When funding is restored, these requirements will be reviewed and revalidated against current federal policy and SACWIS requirements. In addition, the requirements will be updated to support the reusable technology that has been put in place with the CHIMES-EA implementation last year. This technology includes a modern enterprise architecture that is anticipated to align with new federal SACWIS standards that are due to be released.

Also, since the MACWIS project was postponed, the Department has undertaken the development of the Montana Automated Safety Assessment System (MSAMS), a federal standard for the assessment of child safety in the home. MSAMS is a modern web-based application that is being designed with component-based technology that will make it interoperable with the current legacy system, CAPS, and the new technology that will replace it as MACWIS.

Leveraging and reusing these prior and on-going efforts, technology and system investments, it is anticipated that the total project funding required for the MACWIS project remains at the total original appropriation of \$27,150,000. When the department undertakes its executive planning for the 2017 biennium, a request for refunding MACWIS will be considered.